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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,209	12/13/2001	Kevin S. Dibble	020533.0437	1173

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EXAMINER	
JAMAL, ALEXANDER	
ART UNIT	**PAPER NUMBER**
2643	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary -	Application No.	Applicant(s)	
	10/017,209	DIBBLE ET AL.	
	Examiner	Art Unit	
	Alexander Jamal	2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12-13-2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 December 2001* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 1,6-8,11-14,19-21,24-28** rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (6546098), and further in view of Bushue et al. (5539805).

As per **claim 1,** Henderson discloses a NID with interfaces capable of receiving multiple calls over a subscriber line (Fig. 2) and connecting them to multiple telephone lines at the customer premise (Col 12 line 60 to Col 13 line 38). The NID may provide ring voltages to the lines (Col 2 line 64 to Col 3 line 3). However, Henderson does not specify that the processor (Col 3 lines 55-67) is operable to generate the ringing signals on the phone lines in a manner that ensures that a total load on the system is below a threshold.

Bushue teaches a NID (network interface device) that will allocate multiple ringing signals to their respective telephone lines in the event that an 'undervoltage'

event occurs (Col 3 lines 5-20, Col 3 line 53 to Col 4 line 27). This ensures that the device does not exceed a determined threshold level. It would have been obvious to one of ordinary skill in the art at the time of this application to implement a ringing signal allocation such that a maximum load is not exceeded for the purpose of saving power in the device.

As per **claim 14,** claim rejected as a method performed by the device in the rejection of claim 1.

As per **claims 26-28,** claims rejected for the same reasons as the rejection of claim 1. The device inherently comprises software for the purpose of controlling the processor.

As per **claim 6,19,** Bushue discloses that the device is operable to measure the load of any telephone line (sensed by the detection circuit while any line is being rung) (Col 3 lines 50-67).

As per **claim 7,20,** Henderson discloses that the system may receive class of service information received during incoming calls (Col 8 lines 45-60).

As per **claim 8,21,** Henderson discloses that the user may communicate with voice server 500 (Fig. 5) via the use of any standard telephone signaling protocol (this would include DTMF) (Col 10 lines 5-30). Via this interface (Col 11 lines 20-30) (Col 12 line 39 to Col 13 line 4) the user may allocate any telephone number (or incoming call) to any subscriber line in the system.

As per **claims 11,24,** Henderson discloses an interface to communicate with a digital device (enhanced telephone).

As per **claim 12,** Henderson discloses that the NID comprises a DSL line interface (from the CO), a subscriber telephone interface (SLIC) (Fig. 6), a CODEC, a DSP and a wireless interface (Fig. 9).

As per **claims 13,25,** Examiner takes official notice that it is well known in the art to implement telephone ringing signals with a 2 seconds on, 4 seconds off cadence (BUSHUE: Col 1 lines 40-55).

4. **Claims 29,2-3,15-16,4-5,17-18** rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (6546098) and Bushue et al. (5539805) as applied to claims 1,14, and further in view of Cohn et al. (6714644).

As per **claim 29,** Henderson and Bushue disclose claim 29 for the same reasons as the rejection of claim 1,14. However, they do not specify that the multiple ring signals are staggered in an under-voltage condition.

Cohn et al. teaches that in power limited systems, the act of ringing multiple phones simultaneously draws more power than can be supplied to the device (Col 1 lines 15-50). He teaches that the ring signals output to multiple lines may be staggered to ensure that the maximum instantaneous load threshold of the system is not exceeded (Col

2 line 10 to Col 3 line 12). It would have been obvious to one of ordinary skill in the art at the time of this application for Henderson in view of Bushue to implement the ring staggering function taught by Cohn for the purpose of maintaining the reduced power draw of the NID and providing true AC ring signals (as opposed to the AC/DC signals in Bushue) to those customers in an under-voltage situation that do not always require simultaneous signaling.

As per **claims 2,3,15,16,** claims rejected for same reasons as claim 29.

As per **claims 4,5,17,18,** claims rejected for same reasons as claim 29. Bushue discloses that the ringing signals are only allocated in the situation when the total system load exceeds a threshold (Col 4 lines 20-26).

5. **Claims 9,22** rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (6546098) and Bushue et al. (5539805) as applied to claims 1,14, and further in view of Boudreaux Jr. et al. (6584197).

As per **claims 9,22,** Henderson and Bushue disclose applicant's claims 1,14, however, they do not disclose that the NID comprises a local power supply to supply power to the unit, and a line power supply to supply the unit if the local power supply fails.

Boudreaux discloses a NID that is supplied with local power and in case the local power fails, line power may be utilized (Col 13 claim 4). If the local power fails, the line power will assure that the telephone lines are still active. It would have been obvious to

one of ordinary skill in the art at the time of this application to implement a local power source in the NID for the advantage of increased reliability (multiple power sources) in the event of a power supply failure.

6. **Claims 10,23** rejected under 35 U.S.C. 103(a) as being unpatentable over Henderson (6546098) and Bushue et al. (5539805) as applied to claims 1,14, and further in view of Wilkes, Jr. et al. (6757382).

As per **claims 10,23,** Henderson and Bushue disclose applicant's claims 1,14, however, they do not disclose that the NID may switch the line from the CO to the NID or to a Splitter that separates the DC bias on the CO line from the ringing.

Wilkes discloses a NID with a POTS bypass path (lifeline) in the event that the DSL line from the CO is not functioning correctly (Col 2 lines 20-67, Fig. 2). When the bypass is enabled (Col 3 lines 4-27), the subscriber line is connected directly to the CO linecard, which is operable as a splitter that is operable to deliver ringing to the telephone line (during bypass mode) and deliver line power to the NID (during normal mode). It would have been obvious to one of ordinary skill in the art at the time of this application to implement a bypass from the subscriber line to the splitter linecard in the CO for the advantage of increased reliability in the event of an error in the DSL connection between the CO and the NID.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Jamal whose telephone number is 703-305-3433. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A Kuntz can be reached on 703-305-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9315 for After Final communications.

AJ
August 18, 2004

CURTIS KUNTZ
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